

Top 5 Environmental Innovations

Think of innovation and you'll probably think of a breakthrough which shook the world. Yet, while innovation doesn't have to be ground-breaking in order to be successful, the rise in innovations focused towards changing the world for the better is undeniable.

So what's set to make a big impact in the green space? Check out our top five picks on innovations which could transform the world.



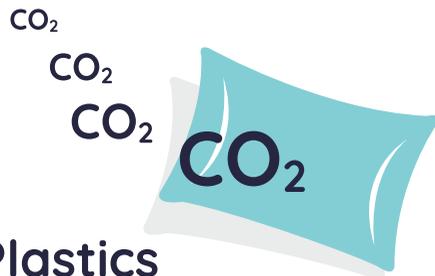
1 Beer power



As the drive towards developing **alternatives to fossil fuels** continues to grow, chemists at the University of Bristol announced recently they had made the first steps towards **turning beer into sustainable petrol**.

If successful, the innovation, which converts widely available ethanol (beer) into butanol could see the technology powered up to an industrial scale.

2 Plastics using CO₂



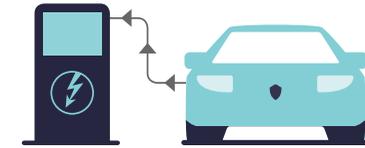
Dreaming of saving the planet? You might be interested to learn, UK-based Economic Technologies has invented a way of encouraging CO₂ to react with the petrochemical raw materials used in the making of many plastics.

The **CO₂** can be **captured from the air and stored** in a range of **everyday items** including the insulation in your fridge freezer; the paint on your car and even your memory foam mattress.

3 Wooden plastic or plastic wood

As reducing plastic continues to ride high on the news agenda, Plastecowood, a company based in Wales, is manufacturing timber substitutes from waste plastic.

Known as Smartawood, the lumber is formed from pretty much any type of plastic; and, for **every tonne** of recycled plastic used by Plastecowood, **700kg of carbon is diverted from landfill**. Good news for the construction industry and the sea life!



Giving back (to the grid) 5

Like the idea of becoming your own powerhouse? The reality might not be too far away, as a **£10 million trial** run by Nissan will test the use of electric vehicles as mini power stations.

The trial, which involves **1,000 car charging points** and capitalises on the predictable patterns of drivers, will see electric vehicles feed power back into the national grid.



Skating on sustainable ice 4

Purdue University researchers have found that using high molecular weight polyethylene covered in a fine mist of water mimicked the performance of ice almost exactly.

In fact, the cost of building a plastic bobsled track is estimated at about £3-4m, **reducing its environmental impact by up to 70 per cent** on a conventional track. Who knows, we may see tracks popping up around the UK!